

Amendments to the Specification:

Please replace paragraph [0012] with the following amended paragraph:

[0012] Figs. 3A, 3B and 3C ~~Fig. 3 is a~~ are graph-graphs for showing results of processed data from the apparatus of Fig. 1 according to one embodiment of the present invention.

Please replace paragraph [0039] with the following amended paragraph:

[0039] Step 5 is to capture and compile ~~compile~~ data for on-site processing. Once the captured data is determined to meet a quality standard based on the original data, the data can be processed on site by using the above-described apparatus. All the data records and documents will be transmitted to the programs in the system 5 for data capturing, controlling, data storage and processing. The data input also includes the measurement starting depth and the calibrated sampling interval. Based on the processed data, the proportions of respective vertical and horizontal coordinates can be determined at the interface. As a result, a graph of results, such as the one shown in ~~Fig. 3~~ Figs. 3A, 3B and 3C, can be achieved finally. In ~~Fig. 3~~ Figs. 3A, 3B and 3C, the horizontal coordinate is a linear coordinate and represents a depth. The depth scale can be adjusted pursuant to pre-defined requirements. The vertical coordinate represents the electromagnetic wave resistivity in the upper curve, which can be either a linear coordinate or a logarithmic coordinate, the electric field intensity in the middle curve, and the magnetic field intensity in the lower curve. As will be appreciated by a person of ordinary skill, all the scales and proportions of these coordinates are adjustable.